

DEC 12 2006

Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

CLAIM LISTING:

1. (Currently amended) A device for treating a patient's heart to improve cardiac function, comprising:
  - a. an inflatable partitioning element which has an outer periphery configured to engage inner surfaces of a ventricular chamber of the patient's heart to partition the chamber into a main productive portion and a secondary, non-productive portion, the inflatable partitioning element comprising a hollow interior adapted to contain an inflation fluid and an inflation port communicating with the hollow interior; and
  - b. at least one anchoring element configured to secure the inflatable partitioning element within the ventricular chamber.
2. (Original) The device of claim 1 wherein the inflatable partitioning element has a proximal face which defines in part the main productive portion of the ventricular chamber.
3. (Original) The device of claim 1 wherein the inflatable partitioning element has a distal face which defines in part the secondary non-productive portion of the ventricular chamber.
4. (Original) The device of claim 1 wherein a plurality of anchoring elements are provided on the periphery of the inflatable partitioning element.
5. (Previously Presented) The device of claim 1 wherein the at least one anchoring element is connected to the proximal face of the inflatable element.
6. (Original) The device of claim 1 wherein the inflatable partitioning element has a distally extending supporting element configured to engage a region of the non-productive portion of the ventricular chamber.
7. (Original) The device of claim 6 wherein the distally extending supporting element is inflatable.

Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

8. (Withdrawn) The device of claim 6 wherein the supporting element has a distal end and an anchoring element on the distal end.

9. (Withdrawn) The device of claim 8 wherein the anchoring element on the distal end of the supporting element is configured to engage a region of the non-productive portion of the ventricular chamber.

10. (Withdrawn) The device of claim 6 wherein the supporting element has a distal extremity which is configured to non-traumatically engage a region of the patient's ventricular wall defining in part the secondary non-productive portion of the heart chamber.

11. (Original) The device of claim 6 wherein the supporting element fills a substantial portion of the non-productive portion of the ventricular chamber.

12. (Original) The device of claim 1 wherein the supporting element fills the entire non-productive portion of the patient's heart chamber.

13. (Original) The device of claim 1 wherein the inflatable partitioning element is at least in part disk shaped.

14. (Original) The device of claim 1 wherein the inflatable partitioning element is hollow.

15. (Original) The device of claim 1 wherein a connecting hub is provided on a proximal portion of the partitioning element.

16. (Original) The device of claim 15 wherein the hub contains a one-way valve to facilitate inflation of the partitioning element.

17. (Original) The device of claim 1 wherein the partitioning element is formed of biocompatible

Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

polymeric material

18. (Original) The device of claim 17 wherein the biocompatible polymeric material is selected from a group consisting of expanded polytetrafluoroethylene, nylon, polyethylene terephthalate, polyester and polyurethane.

19. (Original) The device of claim 1 wherein the inflatable partitioning element has an aspect ratio of thickness to diameter of about 1:10 to about 1:2.

20. (Previously Presented) The device of claim 1 wherein the at least one anchoring element comprises a hook or a barb.

21. (Currently amended) A device for increasing the ejection fraction of a patient's heart chamber, comprising:

- a. an inflatable partitioning element which has an interior configured to receive inflation fluid through an inflation port, which has a peripheral edge and which is configured to partition a ventricular chamber of the patient's heart into a main productive portion and a secondary, non-productive portion; and
- b. a distally extending supporting element configured to engage a region of the non-productive portion of the ventricular chamber.

22. (Original) The device of claim 21 wherein the distally extending supporting element is inflatable.

23. (Original) The device of claim 22 wherein the inflatable distal extending supporting element has an interior in fluid communication with the interior of the partitioning element.

24. (Previously Presented) The device of claim 21 wherein the partitioning element has a hub on a proximal face thereof.

Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

25. (Original) The device of claim 24 wherein the hub has a one way valve configured to deliver inflation fluid to the interior of the partitioning element.

26. (Original) The device of claim 21 wherein the distally extending supporting element is configured to non-traumatically engage a region of the non-productive portion of the ventricular chamber.

27. (Withdrawn) The device of claim 21 wherein the distally extending supporting element is a stem.

28. (Withdrawn) The device of claim 27 wherein the stem has at least one J-shaped distal extremity.

29. (Withdrawn) The device of claim 27 wherein the stem has a plurality of J-shaped distal extremities.

30. (Withdrawn) The device of claim 27 wherein the stem has a distal extremity with an anchoring element configured to secure the stem to a region of the non-productive portion of the ventricular chamber.

31. (Withdrawn) The device of claim 30 wherein the anchoring element is a coil with a tissue penetrating tip.

32. (Original) The device of claim 21 wherein the inflatable partitioning element is at least in part disk shaped.

33. (Currently amended) A device for treating a patient's heart to improve the cardiac function thereof, comprising:

- a. an inflatable partitioning means which has an outer periphery configured to engage inner surfaces of a ventricular chamber of the patient's heart to partition the chamber into a main

Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

productive portion and a secondary, non-productive portion, the inflatable partitioning means comprising a hollow interior adapted to contain an inflation fluid and an inflation port communicating with the hollow interior; and

b. at least one anchoring means configured to secure the inflatable partitioning means within the ventricular chamber.

34. (Original) The device of claim 33 wherein the inflatable partitioning means is disc shaped.

35. (Previously Presented) The device of claim 33 wherein the inflatable partitioning means is hollow.

36. (Original) The device of claim 33 wherein the anchoring means are provided on the outer periphery of the inflatable partitioning means.

37. (Previously Presented) The device of claim 36 wherein the anchoring means comprise a hook or a barb.

38. (Previously Presented) The device of claim 33 further comprising a distally extending support means configured to engage a region of the non-productive portion of the ventricular chamber.

39. (Withdrawn) The device of claim 38 wherein the distally extending support means is configured to non-traumatically engage a region of the patient's ventricular wall defining in part the secondary non-productive portion of the ventricular chamber.

40. (Original) The device of claim 38 wherein the distally extending support means is inflatable.

41. (Withdrawn) The device of claim 38 wherein the distally extending support means is a stem.

42. (Withdrawn) The device of claim 38 wherein the distally extending support means has a distal end and an anchoring means on the distal end.

Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

43. (Withdrawn) The device of claim 42 wherein the anchoring means on the distal end of the supporting element is configured to engage a region of the non-productive portion of the ventricular chamber.

44. (Withdrawn) The device of claim 43 wherein the anchoring means is a coil with a tissue penetrating tip.

45. (Withdrawn) The device of claim 38 wherein the support means has a distal extremity which is configured to non-traumatically engage a region of the patient's ventricular wall defining in part the secondary non-productive portion of the heart chamber.

46. (Original) The device of claim 38 wherein the support means fills a substantial portion of the non-productive portion of the ventricular chamber.

47. (Currently amended) A method of treating a patient with congestive heart failure, comprising:  
providing a device comprising an inflatable partitioning element with a peripheral edge and at least one anchoring element;  
positioning the device within a ventricular chamber of the patient's heart;  
inflating the inflatable partitioning element with an inflation fluid;  
engaging with the peripheral edge of the inflatable partitioning element engaging with a wall of the ventricular chamber to partition the chamber into productive and non-productive portions; and  
spacing a distal face of the inflatable partitioning element from a region of a ventricular wall defining at least in part the non-productive ventricular chamber.

48. (Previously Presented) The method of claim 47 wherein the device further comprises a distal extending support element which spaces the partitioning element.

49. (Previously Presented) The method of claim 47 further comprising delivering the inflatable

Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

partitioning element in a deflated configuration and expanding the inflatable partitioning element within the patient's heart.

50. (Previously Presented) The method of claim 47 further comprising positioning the device within an inner lumen of an elongated catheter, percutaneously introducing the catheter into the patient's vasculature, and advancing the device therein to the patient's heart wherein the device is discharged from the catheter.

51. (Previously Presented) The method of claim 47 wherein the peripheral edge of the device is secured to the wall of the ventricular chamber defining at least in part the ventricular chamber by the at least one anchoring element provided on the edge of the partitioning device.

52. (Canceled)

53. (Currently amended) A device for increasing the ejection fraction of a patient's heart chamber, comprising:

- a. an inflatable partitioning means which has an interior configured to receive inflation fluid, an inflation port communicating with the interior and a peripheral edge and which is configured to partition a ventricular chamber of the patient's heart into a main productive portion and a secondary, non-productive portion; and
- b. a distally extending supporting means configured to engage a region of the non-productive portion of the ventricular chamber.

54. (Original) The device of claim 53 wherein the distally extending supporting means is configured to non-traumatically engage a region of the non-productive portion of the ventricular chamber.

55. (Withdrawn) The device of claim 54 wherein the distally extending support means is a stem.

56. (Withdrawn) The device of claim 55 wherein the stem has at least one J-shaped distal

Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

extremity.

57. (Withdrawn) The device of claim 55 wherein the stem has a plurality of J-shaped distal extremities.

58. (Withdrawn) The device of claim 53 wherein the supporting means has a distal extremity with an anchoring means configured to secure the support means to a region of the non-productive portion of the ventricular chamber.

59. (Withdrawn) The device of claim 58 wherein the anchoring means is a coil with a tissue penetrating tip.

60. (Original) The device of claim 53 wherein the inflatable partitioning means has a hub with a one-way valve to facilitate introducing inflation fluid to the interior of the inflatable partitioning means.

61. (Original) The device of claim 53 wherein the inflatable partitioning means has an aspect ratio of the thickness of the inflatable partitioning means to the diameter thereof is about 1:10 to about 1:2.

62. (Currently amended) A method of treating a patient with congestive heart failure, comprising the steps of:

- a. providing a treatment device having an inflatable partitioning element with a peripheral edge and at least one anchoring element;
- b. positioning the treatment device within a ventricular chamber of the patient's heart;  
inflating the inflatable partitioning element with an inflation fluid;  
engaging the peripheral edge of the partitioning element engaging with a wall of the ventricular chamber to partition the chamber into productive and non-productive portions;  
and



Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

c. spacing a distal face of the inflatable partitioning element from a region of a ventricular wall defining at least in part the non-productive ventricular chamber.

63. (Original) The method of claim 62 including the step of providing an inflatable supporting element extending distally from the inflatable partitioning element.

64. (Original) The method of claim 62 including the steps of delivering the partitioning device in a deflated configuration and inflating the device in position within the patient's heart wall.

65. (Original) The method of claim 53 including the step of first positioning the partitioning device within an inner lumen of an elongated catheter and percutaneously introducing the catheter into the patient's vasculature and the step of discharging the device within the patient's heart chamber.

66. (Original) The method of claim 65 including the step of securing an outer periphery of the inflatable partitioning device within the patient's heart chamber by the at least one anchoring member provided on the periphery of the partitioning device.

67. (Currently amended) A device for treating a patient's heart to improve cardiac function thereof, comprising:

- a. an inflatable partitioning element which has a peripheral edge and which is configured to partition a ventricular chamber of the patient's heart into a main productive portion and a secondary, non-productive portion, the inflatable partitioning element comprising a hollow interior adapted to contain an inflation fluid and an inflation port communicating with the hollow interior; and
- b. a supporting element which extends distally from the inflatable partitioning element and which is configured to engage a region of the non-productive portion of the ventricular chamber.

Application No. 10/791,916  
Amendment dated December 12, 2006  
Reply to Final Office Action of September 12, 2006

c. at least one anchoring element configured to secure the inflatable partitioning element within the ventricular chamber.

68. (Withdrawn) The device of claim 67 wherein an anchoring element is provided on a distal extremity of the distally extending support element.

69. (Withdrawn) The device of claim 68 wherein the anchoring element is a helical coil with a tissue penetrating distal tip.

70. (Canceled)

71. (New) The device of claim 1 further comprising an inflation fluid other than blood within the hollow interior.

72. (New) The method of claim 47 wherein the inflating step comprises introducing an inflation fluid other than blood into an interior portion of the inflatable partitioning element.